in the substance of the median nerve, with the nerve-fibre separated and stretched over it. M. Verneuil said that in his opinion to employ sutures to obtain reunion of nerves was useless, and founded on a wrong principle. In such cases, sensibility always returned from the periphery towards the centre, and was due to collateral innervation, and not to the reformation of the nerve and the passage of nervous impressions along newly formed nerve-fibres. Sufficient time had not elapsed for this to have taken place in M. Notta's case, where sensibility began to return on the thirteenth day. So, too, in excision of the lower jaw, where the inferior maxillary nerve was destroyed, sensibility began to return the day after the operation, and first in the middle line. He would quote the case of a young lady brought to him with the fingers of one hand extremely flexed upon the palm, the superficial flexor tendons and the median nerve being embedded in a cicatrix resulting from ulceration due to the faulty application of a splint. The fingers were movable and sensitive. In the course of an operation, which was attempted to isolate the flexor tendons, the median nerve was cut across. After the operation, however, sensibility was in no way affected, its preservation being obviously due to the collateral innervation of the parts. [If reference be made to an article on this subject by the translator in the *British Medical Journal*, April 1, 1876, the following explanation by Dr. Richet of "collateral innervation" will be found. The terminal filaments of the radial, median, and ulnar anastomose amongst themselves to form loops, from which come off the filaments which end in the touch-corpuscles. As both loops and filaments are compound, containing filaments from the median, radial, and ulnar, section of one of these trunks is powerless to deprive of sensibility the corpuscles which are the essential organs of touch.]—*London Med. Record*, Dec. 15, 1876.

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37. *Spasmodic Contraction of Muscles treated by Excision of Nerves.*—Mr. W. SPENCER WATSON, at a late meeting of the Royal Medical and Chirurgical Society (*Med. Times and Gaz.*, Jan. 6, 1877), read notes of the case of a young lady, aged nineteen years, who was the subject, when nine months old, of so-called infantile paralysis. The right arm and right leg had ever since been contracted at the wrist and ankle. The deformity of the foot, however, had been remedied by division of the tendo Achillis in infancy, and the patient had been able to walk with a limp ever since. The right arm, forearm, and hand had, besides the permanent contraction of the flexors, been more recently subject to violent spasmodic movements which had produced exhaustive debility and a tendency to hysterical paroxysms. After the failure of general remedies and of tenotomy of the more prominent flexors, Mr. Watson divided and excised a portion of the median nerve at the elbow. This relieved the muscular spasm to some extent, and somewhat reduced the previously heightened temperature of the limb. The deep flexors and adductors, however, continued to be subject to violent spasmodic movements, and the wrist continued permanently flexed. Mr. Watson, therefore, with Sir William Gull's sanction, excised a portion of the ulnar nerve behind the inner condyle of the humerus. The contracted muscles were at once released, and the forcibly adducted thumb and little finger set free. The total effect of all the operations has been decidedly beneficial to the patient, but she still complains of pain in those parts now paralyzed as to sensation and motion. The operations of neurectomy and tenotomy were undertaken in this case on the hypothesis that the original central lesion was become secondarily aggravated by the constant peripheral irritation either associated with or caused by the convulsive muscular movements. The primary mischief was central; the peripheral irritation reacted upon the centre. A vicious circle of cumulative nerve-irritation was thus established. The object of the operations was to break the continuity of that circle.

Mr. T. Nunn had recently seen a lady the subject of continuous spasm in the flexors of the leg. This seemed to follow on a blow on the spine. Here division of the nerve would probably have been useless. In Mr. Spencer Watson's case he did not think so much of the nerve need have been removed, as temporary division might have sufficed, and the nerve would have grown again.

Mr. Hulke said that if temporary destruction of the conductivity of a nerve was all that was required, stretching would have been enough for that purpose.

Mr. Barwell spoke of a soldier, the subject of epilepsy, whose arm had been amputated, but at the extremity of the stump the nerves had formed swollen masses. These were removed, the nerves stretched, and no more epileptic fits ensued.

Mr. T. Smith said that if the pain was relieved by chloral and bromide of potassium, would it not have been better to trust to these for a time on the chance of the disease wearing itself out, especially as there seemed to be no permanent shortening of the muscles. Mental emotions had a strong influence in such cases, as was shown in one under his care, where the subcutaneous injection of water sufficed to cure the patient.

Sir James Paget, who had seen Mr. Watson's case, was quite certain that no injection of water would have cured such a patient. Here there was absolute shortening of the muscles, which commonly ended in fixation. The spasm was undoubtedly mainly reflex in its character, and in such cases the division of nerves was of the highest importance; but often section of the nerves was not enough. In a case which had come under his notice there had been fracture of the radius; distortion followed, and finally almost fixation. Section of the nerve did good for a time, but the spasms began to return. Then followed fracture of the opposite radius, and the symptoms began to resemble those which had followed the accident on the other side; but forcible and really painful fixation on splints did much good. Here, too, section of the nerve was most useful.

OPHTHALMOLGY.

38. *Prelachrymal Oily Cysts.*—Under this designation Prof. Verneuil recently brought before the Société de Chirurgie (*L'Union Méd.*, January 6) a pathological condition which, he believes, has not been described by writers on affections of the eye. By a curious coincidence, he has met with three examples within a few years. The first of these occurred in 1874, in a young man who had a cyst at the inner angle of the eye, of the size of a cherry-stone, placed in front of the lachrymal sac. It had been there a very long time, and was indolent, colourless, and irreducible. M. Verneuil, believing it to be a tumour of the sac, punctured it, and drew off the contents by a Pravaz syringe, and was much astonished to find that the liquid withdrawn had all the appearance of olive oil, which also it resembled in chemical characters. The tumour disappeared, and the patient quitted the hospital at once and did not return.

In 1875 a young girl, aged nineteen, was brought to him for the purpose of having a tumour removed from the angle of the eye, which, she said, she had had from childhood, but which had increased much of late. It was placed a little above the lachrymal sac, was very hard, and of the size of an ordinary cherry, greatly distending the skin that covered it. M. Verneuil, believing that he had to do with a congenital cyst of the orbit, made an incision with the intention of cauterizing its wall. Hardly had the bistoury penetrated, when there issued a filiform jet of what looked just like oil, about a gramme of which was caught in a watch-glass, but was afterwards lost. Enucleation was sought to be practised; but, owing to the firm adhesions to deep-seated parts, only about two-thirds could be removed. In this crystals of cholesterine and margaric acid were detected.

A third case presented itself last November, in the person of a man, aged twenty-one, who had a tumour the size of an almond, which occupied the whole of the inner angle of the orbit. The skin was extremely distended and transparent. It had existed from early infancy, and was now very firm and resisting, being deeply attached to the subjacent parts, and possessed of no real mobility. It was quite indolent, and never had caused any disturbance of vision or obstruction to the flow of tears. A puncture practised by Dieulafoy's